Fayez Bajjali

Physicist turned Data Engineer

fayezbajjali.me ⬡ GitHub 🔗 LinkedIn ✉ fayez.bajjali@proton.me

Experience

REGNOLOGY GERMANY GMBH │ Data Engineer
Since February 2024

- → Maintained Apache Spark data pipelines written in Scala for financial entities.
- → Optimized custom Apache Airflow base image, used for orchestrating data pipelines, in preparation for migrating to Kubernetes.
- → Created automated test suite for orchestration code with pytest and Gitlab CI/CD.
- → Changed Amazon S3 protocol compatible object storage service implementation, reducing incoming customer tickets regarding file availability by ca. 70%.
- → Introduced standardized local setup to simplify of testing during development, significantly decreasing test run times on developers' local machines.

RESEARCH AND DEVELOPMENT, BEIERSDORF AG
AI & IOT LAB │ Working Student - Data Science
September 2021 - August 2023

- → Statistical analysis on time series data to uncover patterns and trends, using user data in compliance with GDPR.
- → Performed error analysis on raw data to ensure the accuracy and integrity of drawn conclusions.
- → Documented and communicated findings, methodologies, and approaches to technical and non-technical audiences.
- → Implemented data visualizations to present complex information for data-driven storytelling.

UNIVERSITÄT HAMBURG
IEXP, DETECTOR DEVELOPMENT │ Student Research Assistant
May 2017 – March 2021

Publications

[1] Bajjali, F., et al. First results from BRASS-p broadband searches for hidden photon dark matter. JCAP 08 (2023), 077.

Referees

- Prof. Dr. Dieter Horns │ University of Hamburg
  Email: dieter.horns@uni-hamburg.de

- Dr. Le Hoang Nguyen │ University of Hamburg
  Email: le.hoang.nguyen@uni-hamburg.de

- Kasia Ziolkowska │ Beiersdorf
  Email: katarynza.ziolk@gmail.com

Languages

Arabic	Native
English	C2
German	C1

Skills

PROGRAMMING

Proficient:
Python

Experienced:
Lua

Basic:
Scala • Go • Nix

LIBRARIES/FRAMEWORKS

Numpy • Pandas • Scipy • Joblib • Apache Airflow • Apache Spark

TOOLS/PLATFORMS

Git • Bash • Neovim • Linux • Gitlab-CI/CD • Docker • LaTeX • SQL • NixOs/home-manager

Education

PHYSICS, M.SC.
Universität Hamburg
2019 - 2023
Thesis title: Searching for WISPy Cold Dark Matter with BRASS (PDF here)

PHYSICS, B.SC.
Universität Hamburg
2015 - 2019

Coursework

PHYSICS

Astroparticle Physics
Quantum Technologies
Standard Model Physics
Super Resolution Microscopy

ELECTIVES

Labor Economics • Philosophy of Political Economy • Democratic Decision Making • The Ethics of Capitalism